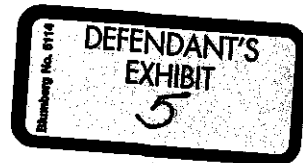


**OFFICIAL FILE**

I.C.C. DOCKET NO. 104-0075  
Group Exhibit No. 5

Witness \_\_\_\_\_

Date 9/28/65 Reporter KD






# Illinois Department of Transportation


2300 South Dirksen Parkway / Springfield, Illinois / 62764

The Federal Highway Administrator has approved and issued the 2003 Edition of the Manual on Uniform Traffic Control Devices as the National Standard for all highways open to public travel in accordance with Title 23 U.S. Code Sections 109(d), 114(a), 217, 315, and 402(a), and 23 Code of Federal Regulations (CFR) 655, and 49 CFR 1.48(b)(8), 1.48(b)(33), and 1.48(c)(2).

Pursuant to the provisions contained in Section 11-301 of the Illinois Vehicle Code (625 ICS 5/11-301), we certify that we have examined this Manual on Uniform Traffic Control Devices. We hereby declare that the Federal manual is adopted as the official manual for a uniform system of traffic control devices for the State of Illinois subject to such amendments as are set forth in the Illinois Supplement to the National Manual on Uniform Traffic Control Devices to address unique State laws and policies. The provisions contained herein shall supersede the policies and standards established by all official manuals published previously.



Timothy W. Martin  
Secretary



Victor A. Modler, P.E.  
Director of Highways

November 2004

# **ILLINOIS SUPPLEMENT TO THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES**

## **INTRODUCTION TO THE SUPPLEMENT**

As noted in the preceding certification, the 2003 edition of the Illinois Manual on Uniform Traffic Control Devices (IMUTCD) consists of the December 2003 of the national Manual on Uniform Traffic Control Devices (MUTCD), including subsequent official revisions thereto, as amended by this Illinois Supplement to the MUTCD. The MUTCD is available on-line at <http://mutcd.fhwa.dot.gov/>

The part, section and paragraph numbers used in this supplement match the like numbers used in the MUTCD. Where no reference is made to a part, section or paragraph of the MUTCD, said part, section or paragraph has not been amended. Unless specifically noted, none of the provisions of the MUTCD are omitted. Where a section number appears in this supplement with the letter "I" added before the paragraph number followed by (Illinois), such as 2B.I43 (Illinois), such paragraph has no direct counterpart in the MUTCD. The meanings of the text headings of "Standard," "Guidance," "Option," and "Support" have the same meanings in this supplement as they do in the MUTCD. Attention is directed to the Introduction to the MUTCD.

With the issuance of this manual, any newly installed traffic control devices should, as much as practical, be in conformance with the standards contained herein. Existing stocks of signs conforming to the previous manual may be used for replacement purposes but shall be replaced with conforming signs by the target compliance dates established by the FHWA which are listed in the Introduction to the MUTCD.

It is anticipated that revisions will be periodically made to the MUTCD. These will be reviewed by the department and revisions made to this supplement when appropriate.

The MUTCD makes reference to the Uniform Vehicle Code (UVC). However, the Illinois Vehicle Code (625 ILCS 5/1-100 et seq.) (IVC) shall govern over the UVC. Section 5/11-301 of the Illinois Vehicle Code contains the authority for the IMUTCD. Sections 5/11-301 and 303 establish the responsibility for the erection and maintenance of traffic control devices on state highways and on local roads. Various other sections of the Illinois Vehicle Code, particularly in Chapter 11, deal with specific traffic regulations and control devices.

Standard signs are designated by letters and numbers such as R2-1-2430. The key to the sign designations is as follows. The beginning letter indicates the general type of sign, such as R for regulatory, W for warning, etc. The first number indicates the sign group such as speed series, crossing series, etc. The number between the hyphens is the designation of the sign within its group. All Illinois Standard signs which differ from those in the MUTCD will have a letter and number designation beginning with the letter "I," such as I100, to distinguish them from the signs found in the MUTCD. Also found in this position may be lower case letters where there are alternate messages (where there are both word and symbol messages or alternate word messages) or the letters R and L for right and left. The third number provides the dimensions such as 2430 which indicates a sign 24 inches wide by 30 inches high. Only one dimension is commonly

given for signs having equal sides. When a dimension is variable it may be denoted with a "V." A letter in parenthesis may follow the number giving a color. For example, a construction and maintenance warning sign may have an (O) indicating that it is orange in color.

A listing of the most commonly used Illinois Standard signs may be found at the end of this Supplement as well as illustrations of the Illinois Standard signs noted in this supplement. Design details for these signs may be found in the Illinois Standard Signs booklet available from the Illinois Department of Transportation, Manual Sales, 2300 South Dirksen Parkway, Springfield, Illinois 62764.

## **PART 8**

### **Traffic Controls for Highway-Rail Grade Crossings**

#### **CHAPTER 8B. SIGNS AND MARKINGS**

##### **Section 8B.04 Highway-Rail Grade Crossing Advance Warning Signs (W10 Series)**

###### **Standard:**

In the first "Standard" under this section change "C" to read:

C. In business and residential districts where active highway-rail grade crossing traffic control devices are in use.

###### **Standard:**

When using Table 2C-4 in Chapter 2C to determine the placement of the Highway-Rail Grade Crossing Advance Warning sign, Condition B, deceleration to 0 mph, shall be used.

##### **Section 8B.18 Storage Space Signs (W10-11, W10-11a, W10-11b)**

Section 8B.18 shall be replaced in its entirety with the following:

###### **Standard:**

A XX FEET BETWEEN TRACKS AND HIGHWAY storage distance (W10-I100) sign shall be installed on any approach to a railroad grade crossing where the distance between the rail closest to a subsequent STOP sign controlled highway intersection and the intersection stop line is less than 81 feet. The sign shall be installed in advance of the grade crossing. The distance to be shown on the sign shall be measured from a point 6-feet from the rail closest to the intersection to the stop line or crosswalk, which ever is closer, rounded down to the nearest 5-feet. Where there is no stop line or crosswalk, the measurement shall be to point 5-feet from the edge of the closest through traveled lane. The signs shall not be used with traffic signal controlled intersections with one exception. The exception is that signs shall be installed as an interim measure at any location with intersection traffic signals which will be changed to pre-signals (near-side intersection signals on the approach side of the tracks) at the grade crossing at a future time. Signs installed as an interim measure shall be removed when the pre-signals are installed.

###### **Guidance:**

Dual displays of the W10-I100 sign should be installed on multilane approaches with suitable medians.

**Standard:**

**A DO NOT STOP ON TRACKS (R8-8) sign shall be installed in advance of each crossing where a W10-I100 sign is used.**

**Option:**

The R8-8 sign may be placed under the W10-I100 sign.

**CHAPTER 8D. FLASHING-LIGHT SIGNALS, GATES,  
AND TRAFFIC CONTROL SIGNS**

**Section 8D.01 Introduction**

**The first paragraph of the first Standard shall be replaced in its entirety with the following:**

**Standard:**

**The meaning of flashing-light signals and gates shall be as stated in Sections 5/11-1201 and 5/11-1203 of the Illinois Vehicle Code.**

**OFFICIAL FILE**

C.C. DOCKET NO. 704-0075

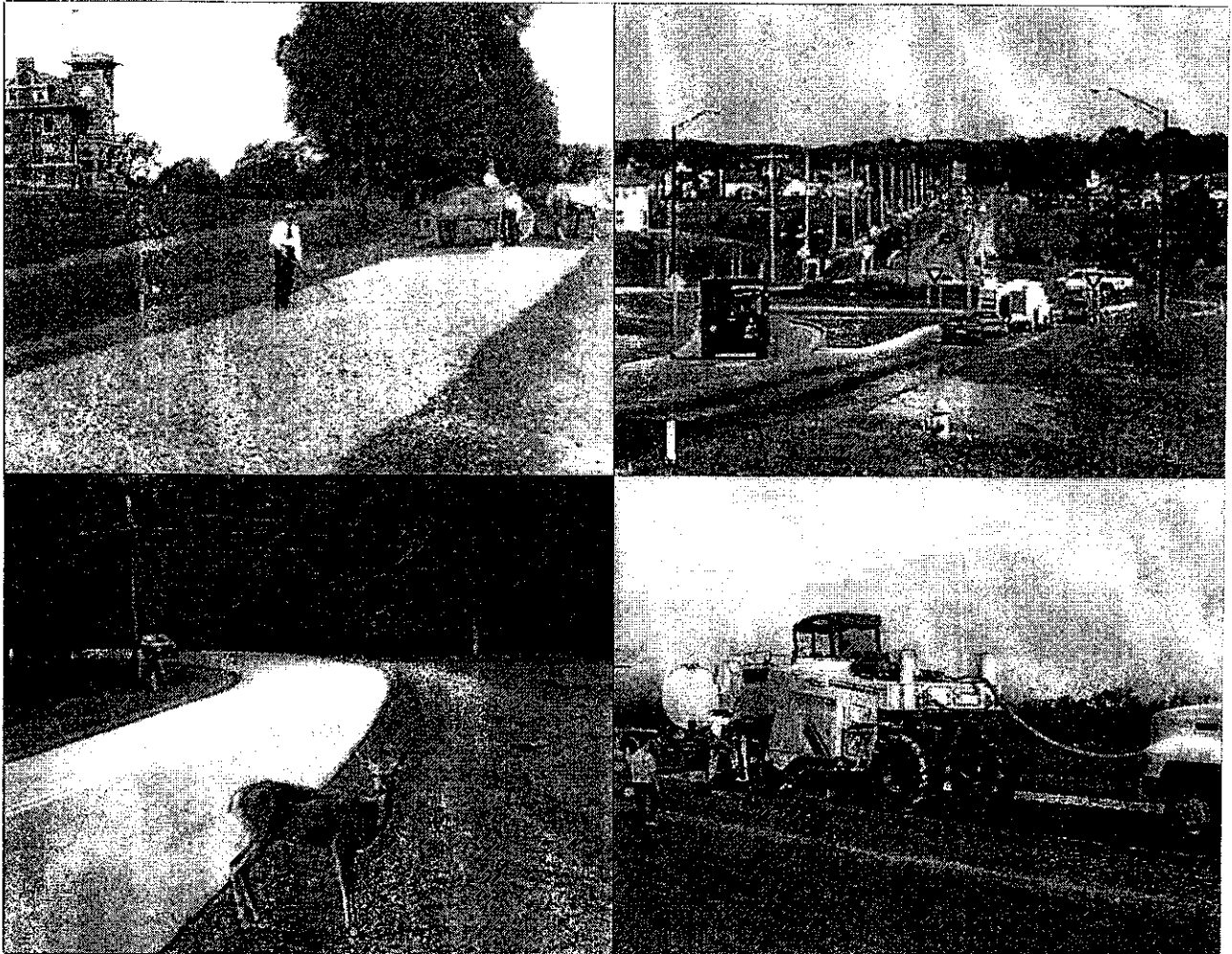
Group Exhibit No. 9

Witness \_\_\_\_\_

Date 9/24/05 Reporter Djfer



# Bureau of Local Roads and Streets Manual



**Illinois Department of Transportation**  
Division of Highways



**TABLE OF CONTENTS**

(Continued)

<b><u>Section</u></b>	<b><u>Page</u></b>
31-3 Right-of-Way .....	31-3(1)
31-4 References .....	31-4(1)
<b>Chapter 32 Geometric Design Tables (New Construction/Reconstruction)</b>	
32-1 General .....	32-1(1)
32-2 Geometric Design Criteria .....	32-2(1)
32-3 Alignment Criteria .....	32-3(1)
<b>Chapter 33 Geometric Design of Existing Highways</b>	
33-1 General .....	33-1(1)
33-2 3R Policies .....	33-2(1)
33-3 3R Geometric Design Criteria .....	33-3(1)
33-4 Local Agency Pavement Preservation .....	33-4(1)
33-5 Speed Maintenance Projects .....	33-5(1)
33-6 Intermittent Resurfacing Policy .....	33-6(1)
33-7 References .....	33-7(1)
<b>Chapter 34 Intersections</b>	
34-1 General Design Controls .....	34-1(1)
34-2 Turning Radii .....	34-2(1)
34-3 Auxiliary Turn Lanes .....	34-3(1)
34-4 Islands .....	34-4(1)
34-5 Extension of Through Lanes Beyond an Intersection .....	34-5(1)
34-6 Intersection Design Near Railroads .....	34-6(1)
<b>Chapter 35 Roadside Safety</b>	
35-1 Definitions .....	35-1(1)
35-2 Roadside Clear Zones .....	35-2(1)
35-3 Treatment of Roadside Hazards .....	35-3(1)
35-4 Roadside Barrier .....	35-4(1)
<b>Chapter 36 Bridge/Structure Design</b>	
36-1 General .....	36-1(1)
36-2 Structural Design .....	36-2(1)
36-3 Bridge Sizing/Geometrics .....	36-3(1)

(x)

**34-1.04 Design Vehicles****34-1.04(a) Types**

The design vehicle affects the radius returns, left-turn radii, lane widths, median openings, turning roadways, and sight distances at an intersection. Typical design vehicles used for intersection design are:

- P — Passenger car; includes vans and pickup trucks.
- S-BUS-40 (S-BUS-12) — 84-passenger school bus.
- SU — Single-unit truck.
- WB-40 (WB-12) — Tractor/Semitrailer combination with an overall wheelbase of 40 ft (12.2 m).
- WB-50 (WB-15) — Tractor/Semitrailer combination with an overall wheelbase of 50 ft (15.2 m).
- WB-55 (WB-17) — Tractor/Semitrailer combination with an overall wheelbase of 55 ft (16.8 m).
- WB-65 (WB-20) — Tractor/Semitrailer combination with an overall wheelbase of 65 ft (19.4 m).
- P/T — Recreational vehicle, car, and camper trailer.

Chapter 36 of the *BDE Manual* and the *AASHTO Green Book* provide the vehicular dimensions and turning templates for each of the above design vehicles.

**34-1.04(b) Selection**

Figure 34-1G presents the recommended design vehicles at intersections based on the functional classification (see Section 27-3) of the intersecting highways from which and onto which the vehicle is turning. The design vehicles shown in Figure 34-1G are for new construction and reconstruction projects. Figure 34-1H presents the recommended truck type that should be used based on the Illinois "Designated State Truck Route System." For 3R projects, the design vehicle will be site specific, and it may be a design vehicle with a more restrictive turning radius than those for new construction and reconstruction projects.

In addition to Figure 34-1G, consider the following guidelines when selecting a design vehicle:

1. **Minimum Designs.** The SU and/or school bus design vehicles are generally the smallest vehicles used in the design of local intersections. This design reflects that, even in residential areas, garbage trucks, delivery trucks, and school buses will be negotiating turns with some frequency. Rural and suburban intersections that may serve school bus traffic should, at a minimum, accommodate a turning school bus without encroachment. Urban intersections only need to accommodate design vehicles that are expected to use that intersection.
2. **Recreational Areas.** Recreational areas typically will be designed using the SU design vehicle. This reflects that service vehicles are typically required to maintain the recreational area. Under some circumstances the passenger car with a trailer (P/T) may be the appropriate design vehicle (e.g., campground areas, boat launches).

For Turn Made		Design Vehicle <sup>(1)(2)(3)(4)(5)</sup>
From	Onto	
Freeway Ramp	Other Facilities	WB-65 (WB-20)
Other Facilities	Freeway Ramp	WB-65 (WB-20)
Arterial	Arterial	WB-65 (WB-20)
	Collector	WB-55 (WB-17)
	Local	WB-50 (WB-15)
	Local (Residential)	SU*
Collector	Arterial	WB-55 (WB-17)
	Collector	WB-55 (WB-17)
	Local	WB-50 (WB-15)
	Local (Residential)	SU*
Local	Arterial	WB-50 (WB-15)
	Collector	WB-50 (WB-15)
	Local	SU*
	Local (Residential)	SU**
Local (Residential)	Arterial	SU*
	Collector	SU*
	Local	SU**
	Local (Residential)	SU**

\*With encroachment, a WB-50 (WB-15) vehicle should physically be able to make the turn.

\*\*With encroachment, the selected design vehicle should physically be able to make the turn.

**Notes:**

1. Use this Figure for new construction and reconstruction projects.
2. A smaller design vehicle may be considered after an investigation of conditions. Justification must be submitted for intersections with State highways.
3. For 3R projects, the design vehicle will be site specific. See Chapter 33.
4. A larger design vehicle may be required for intersections of two 80,000 lb (36,000 kg) truck routes.

**SELECTION OF DESIGN VEHICLE AT INTERSECTIONS  
(Functional Classification)**

**Figure 34-1G**

Type of Truck Route	Design Vehicle	Maximum Length of Trailer Allowed (m)	Maximum Length Kingpin to Center Rear Axle (m)
Class I	WB-65 (WB-20)	53' (16.16 m)	45.5' (13.87 m)
Class II	WB-65 (WB-20)	53' (16.16 m)	45.5' (13.87 m)
Class III	WB-55 (WB-17)	53' (16.16 m)	42.5' (12.96 m)
Other State Highway	WB-55 (WB-17)	53' (16.16 m)	42.5' (12.96 m)
Local Roads and Streets	WB-50 (WB-15)	Not Specified	Not Specified

*Illinois Statutes allow additional access off designated truck routes under different conditions. These are defined as follows:*

1. *Any tractor/semitrailer vehicle operating on a Class I truck route shall have access onto any street or highway for a distance of 1 mile (1.61 km) from a Class I highway to load and unload and to allow the driver to obtain food, fuel, rest, or repairs. However, some local highway authorities may post truck restrictions altering this provision. Under this condition, the combination truck units allowed access off the Class I truck route may be up to 8 ft (2.59 m) wide with a 53 ft (16.16 m) long trailer.*
2. *Any tractor/semitrailer vehicle operating on a designated State highway (Class I, II, III, or Other State Highways) shall have access on another designated State highway for a distance of 5 mi (8.05 km) on such streets or highways to load and unload and to allow the driver to obtain food, fuel, rest, or repairs.*
3. *If local authorities designate any street or highway for the same large vehicles and the same uses as stated above, such large vehicles may also use these locally designated highways as truck routes. However, these large vehicles are prohibited from using all other streets and highways under local jurisdiction unless an exception is applicable. An exception would be applicable on a local highway where a combination truck unit is within 5 mi (8.05 km) of a designated truck route and where no restricted weight limit is posted on the local highway. In such cases, the combination truck unit may be up to 8 ft (2.59 m) wide, and can have an overall length of 65 ft (19.82 m).*

**DESIGN VEHICLE SELECTION**  
**(Designated State Truck Route System)**

**Figure 34-1H**

3. **Mixed Use.** Some portions of an intersection may be designed with one design vehicle and other portions with another vehicle. For example, it may be desirable to design physical characteristics (e.g., corner islands) for the WB-65 (WB-20) truck but provide painted channelization for the SU design vehicle.

#### **34-1.05 Pedestrians and Bicyclists**

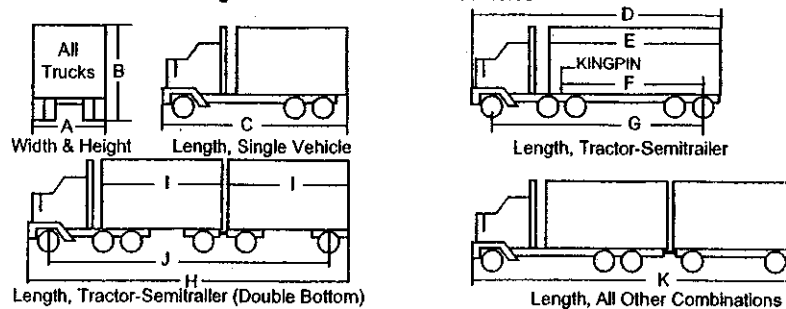
Safe and convenient movement of pedestrians and bicyclists through the intersection needs to be considered in the design of an intersection. However, this often causes conflicting objectives in the overall design of an intersection. Wider intersection designs to accommodate the design vehicle significantly increase the crossing distance for pedestrians. At signalized intersections, longer crossing times and conflicts with turning vehicles can significantly affect the overall capacity of the intersection. To reduce these problems, the geometric layout of the intersection may need to be revised, refuge islands included within the intersection, special turn lanes added for bicyclists, or other factors included in the design.

Section 41-6 discusses the application of curb ramps at intersections for disabled individuals. The *BDE Manual* and *ILMUTCD* provide several applications for accommodating bicycle lanes and pedestrians through an intersection.



# Illinois Department of Transportation

TABLE I: Maximum legal dimensions of motor vehicles



Type of Highway or Street	Maximum Legal Dimensions											Maximum Weights		
	A	B	C	D	E	F	G	H	I	J	K	Single Axle	Tandem Axle	Gross
Class I	8'-6"	13'-6"	42'	N.S.	53'	45'-6"	N.S.	N.S.	28'-6"	N.S.	60'	20,000	34,000	II
Class II	8'-6"	13'-6"	42'	N.S.	53'	45'-6"	N.S.	N.S.	28'-6"	65'	60'	20,000	34,000	II
Class III	8'	13'-6"	42'	65'	53'	42'-6"	55'	60'	N.S.	N.S.	60'	20,000	34,000	II
Other State Highway	8'	13'-6"	42'	65'	53'	42'-6"	55'	60'	N.S.	N.S.	60'	18,000	32,000	III
Local Roads and Streets	8'	13'-6"	42'	55'	N.S.	N.S.	N.S.	60'	N.S.	N.S.	60'	18,000	32,000	III

N.S. indicates legal dimension not specified

**Notes:**

- 65 feet overall length (bumper to bumper) and/or 55 feet from center of front axle to center of rear axle.
- Tandem is defined as any 2 or more single axles whose centers are more than 40 inches and not more than 96 inches apart, measured to the nearest inch between extreme axles.
- See tables II and III on reverse side.
- Applies on semitrailers longer than 48 feet.

**Exceptions to WIDTH requirements above:**

- Above restrictions do not include certain safety devices approved by the Department.
- Household goods carriers shall have access to points of loading and unloading and may have a maximum width of 8 feet 6 inches.
- A maximum width of 8 feet 6 inches is allowed on any street or highway to any point of loading or unloading for vehicle combinations that include a trailer or semitrailer not exceeding 28 feet 6 inches in length, which was originally part of a truck tractor-semi-trailer-trailer combination (double-bottom).
- Width restrictions do not apply to vehicles transporting implements of husbandry operating in the daytime. Loads of hay, straw or other similar farm products are limited to a maximum of 12 feet.

**Exceptions to LENGTH requirements above:**

- Length limits do not apply to vehicles operating in the daytime, except on Saturdays, Sundays or legal holidays when transporting poles, pipes, machinery or other objects of a structural nature which cannot be readily dismembered, provided the length of the object being transported does not exceed 80 feet and the overall length of the load does not exceed 100 feet.
- Slinger-steered vehicles specifically designed to transport motor vehicles or boats may have an overall length of 75 feet plus overhang of 3 feet in front and 4 feet in the rear on Class I and II highways. Conventional auto transporters are vehicles specifically designed to transport motor vehicles or boats may have an overall length of 65 feet plus overhang on these highways. The maximum overall length on all other streets and highways is 60 feet.

**GENERAL exceptions to above:**

- All large vehicles operating on Class I highways shall have access for a distance of one mile on any street or highway to points of loading and unloading, and facilities for food, fuel, rest and repair.
- Large vehicles operating on designated state highways shall have access for a distance of 5 highway miles on any other state highway and on designated local streets and highways, to points of loading and unloading, and facilities for food, fuel, rest and repair. (This applies only on local streets and highways specifically designated and posted by local officials.)
- Permits may be issued for overdimensional objects and vehicles if they have been reasonably disassembled. Multiple objects loaded side-by-side, end-to-end or on top of each other may not cause the overdimension.

**Special Haul Vehicles**

See Table IV on reverse for additional information on Special Haul Vehicles

Type of Highway or Street	Maximum Legal Dimensions											Maximum Weights		
	A	B	C	D	E	F	G	H	I	J	K	Single Axle	Tandem Axle	Gross
Classes I, II, III Other State Highways and Local Roads and Streets	8'-6"	13'-6"	42'	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	60'	20,000	See	See
	①			②								③	④	⑤

**Notes:**

- 8' on Class III, Other State Highways and Local Roads and Streets.
- 55' on Local Roads and Streets, 65' from designated State Highway (5 mile access law).
- 18,000 pounds on Other State Highways and Local Roads and Streets.
- Greater than 72" and not more than 96" may carry 18,000 pounds on each axle.
- Gross weight is determined by measuring to the nearest foot between extreme axles. ( $\leq 42'$  see Table III,  $> 42'$  see Table II)

Maps of the designated state truck route system are available by calling 217/782-6271

### Maximum loading for typical vehicles

**Notes:**

- ① Measured to the nearest foot between the extremes of any group of two or more consecutive axles.
- ② Gross weights for 5 and 6 axles applicable only to a combination of vehicles.
- ③ Two consecutive sets of tandems may carry 34,000 pounds each providing the overall distance between the first and last axles of such consecutive sets of tandems is 36 feet or more.
- ④ If the distance between the centers of the first and third axles in a group of consecutive axles does not exceed 96 inches, the group is a tandem.
- ⑤ Maximum single axle 20,000 pounds; maximum tandem 34,000 pounds.
- ⑥ Combinations of vehicles designated as special haul vehicles which include a semitrailer manufactured prior to the model year 2004 and first registered in Illinois prior to January 1, 2005 having five axles with a distance of 42 feet or less between extreme may have a gross weight of 72,000 pounds provided the weight shall not exceed 18,000 pounds on a single axle or 32,000 pounds on a tandem. For such combinations manufactured subsequent to September 9, 1986, the minimum distance between the first and last axles of the two sets of tandems must be 18 feet 6 inches or more.
- ⑦ Permits may be issued for an overweight load providing it consists of one object that cannot be reasonably dismantled or disassembled.

**TABLE III: Maximum gross weight of vehicles not on the designated State highway truck route system.**

**Vehicle or Combination**

**Gr. Wt.**  
36,000  
(See note 1)

**Vehicle or Combination**

**B Gr. Wt. B Gr. Wt.**

10' - 41,000 16' - 46,000  
11' - 42,000 17' - 47,000  
12' - 43,000 18' - 47,500  
13' - 44,000 19' - 48,000  
14' - 44,500 20' - 49,000  
15' - 45,000 21' - 50,000  
or more

**Vehicle or Combination**

**C Gr. Wt. C Gr. Wt.**

15' - 50,000 26' - 57,500  
16' - 50,500 27' - 58,000  
17' - 51,500 28' - 58,500  
18' - 52,000 29' - 58,500  
19' - 52,500 30' - 60,000  
20' - 53,500 31' - 60,500  
21' - 54,000 32' - 61,500  
22' - 54,500 33' - 62,000  
23' - 55,500 34' - 62,500  
24' - 56,000 35' - 63,500  
25' - 56,500 36' - 64,000  
or more

**Combinations**

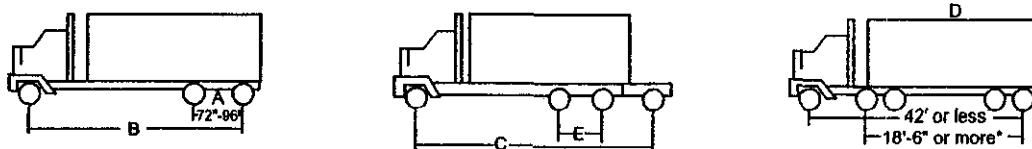
**D Gr. Wt.**

42' or less 72,000  
43' 73,000  
44' or more 73,280

- Notes:**

1. Either axle on a two-axle vehicle may weigh 20,000 pounds providing the gross weight of the vehicle does not exceed 36,000 pounds and the vehicle is not part of a combination.
2. Maximum single axle 18,000 pounds; maximum tandem axle 32,000 pounds.
3. Permits may be issued for an overweight load providing it consists of one object that cannot be reasonably dismantled or disassembled.

**TABLE IV : Special Axle and Gross Weight Allowances for Special Haul Vehicles**



A. 18,000 lbs. on each axle - total of 36,000 lbs.  
B. See Table I)  
C. See Table II  
D. Gross weight of 72,000 lbs., provided the weight shall not exceed 18,000 lbs. on a single axle or 32,000 lbs. on a tandem.

A. 18,000 lbs. on each axle - total of 36,000 lbs.  
B. See Table II  
C. See Table III  
D. Gross weight of 72,000 lbs., provided the weight shall not exceed 18,000 lbs. on a single axle or 32,000 lbs. on a tandem.  
E. 18,000 lbs. on each axle - total of 36,000 lbs.

\*This requirement does not apply to semitrailers manufactured before September 9, 1986.

**Note: Special Hauling Vehicles must meet width, height and length requirements as specified in Table 1.**

Maps of the designated state highway truck route system are available by calling 217/782-6271